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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,116	09/23/2003	Robert Miller	37505.0075	4082

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EXAMINER

ECHELMEYER, ALIX ELIZABETH

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,116

Applicant(s)

MILLER, ROBERT

Examiner

Alix E. Echelmeyer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on September 23 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on line 24 of page 6, "thusly *assembly* electrode assembly" should read, "thusly *assembled* electrode assembly" as assembly is a noun but should be an adjective to modify electrode; on line 18 of page 7, detail should be detailed, as detailed is being used as an adjective to modify "description".

Appropriate correction is required.

Claim Objections

2. Claim 4 is objected to because of the following informalities: *designates* should be changed to *designate* since it is the verb for the noun *marks*. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claims 8 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what the specified weight is.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 7 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Lessar et al. (US Patent 6,006,133).

Lessar et al. teach an energy source having a planar layered structure with anode and cathode layers having separator layers in between. The separator layers are impregnated with a solid or liquid electrolyte. The anode and cathode layers have registration tabs extending from their perimeter. The entire assembly is sealed in a case. The anode and cathode layers are connected electrically (column 8 lines 59-67, column 9 lines 1-17).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9-13, 15, 16, and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Lessar et al. in view of Gan et al. (US Patent 6,790,561).

The teachings of Lessar et al. as discussed above are incorporated herein.

Lessar et al. teach an electrode with an active material contacted to the current collector, a registration tab, a counter electrode, a separator between the electrodes, a casing housing the electrodes, and an electrical connection between the electrodes. Lessar et al. teach the use of the electric energy storage device, specifically an electrochemical or electrolyte capacitor, in an implantable medical device. Lessar et al. fail to teach the use of silver vanadium oxide (SVO) and fluorinated carbon (CF_x) as active electrode materials, the wing shape, or the method of forming the electrodes.

Gan et al. teach a method for forming an electrode having two active materials with the following configuration: SVO / current collector / CF_x / current collector / SVO (column 2 lines 35-54, column 8 lines 7-12).

The use of these materials allows for electrode active materials having different strengths and weaknesses to share both ions and electrons during cell discharge (column 2 lines 24-36).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the configuration taught by Gan et al. in the electrical energy storage device of Lessar et al. in order to create a cell structure that could share both ions and electrons during cell discharge.

With regards to claim 11, Gan et al. teach that the anode current collector can be formed in some other geometry in order to allow an alternate low surface cell design (column 5 lines 53-64). Changing the shape of the cathode to match the shape of the anode would reduce the amount of surface area not matched by the cathode.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the current collectors of Lessar et al. to have the configuration with two active materials mentioned above and a different shape, such as a wing shape with the registration tab between the two wings.

Regarding claim 12, Gan et al. teach the use of a jellyroll-type configuration (column 9 lines 15-21).

This configuration allows for a larger surface area of contact among the parts of the cell.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to put the current collectors of Lessar et al. in the configuration mentioned above into a jellyroll-type configuration in order to increase the surface area of contact among the parts.

As for claim 15, Gan et al. teach the use of the electrical energy storage device having an electrode of the configuration SVO / current collector / CF_x / current collector / SVO in an implantable cardioverter defibrillator (column 3 lines 1-2).

The use of a cell having an electrode of the type described above is particularly well suited for this use, according to Gan et al. This teaching would suggest the use of such devices as medical implants.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the electrode made by the combination of Lessar et al. and Gan et al. as discussed above in an implantable cardioverter defibrillator because it is taught by Gan et al.

8. Claims 2-6, 14, 17, 18, and 20-22 and rejected under 35 U.S.C. 103(a) as being unpatentable over Lessar et al. and Gan et al. in view of Merlin et al. (US Patent 5,552,574).

The teachings of Lessar et al. and Gan et al. as discussed above are incorporated herein.

Lessar et al. teach a registration tab and a housing casing, but fail to teach an ID matrix, marks applied by etching, marks designating a serial number, marks relating to the weight of the current collector, or marks relating to a gram amount of the electrode active material contacted to the support portion of the current collector.

Merlin et al. teach a method for marking particulars on a card having metal contacts. They teach the use of a laser beam to etch said particulars, such as a security message or manufacturer's identification. The etching can be performed at any stage in the manufacturing process. This process permits units to be identified individually (abstract, column 1 lines 15-17, column 2 lines 6-38).

Although Merlin et al. do not teach marks relating to the weight of a current collector or gram amount of electrode active material, the disclosure does teach the etching of information during any stage of production. Thus, the producer of the part can decide when and what to etch onto the tab or casing housing.

Further, regarding claims 20 and 22, the purpose of providing information on a part is to allow for information about the part to be accessed. If the information were not to be used, then there would not be a need to put information on the part. Scanning the

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identifying information on the current collector tab of Lessar et al. that was put there using the method of Merlin et al. would allow one working with the current collector to access the information when it was needed.

Adding the identifying information of Merlin et al. to the registration tab on the anode or cathode of Lessar et al. allows one working with the anode or cathode to put information about the particulars, such as a security message or manufacturer's identification, of said anode or cathode. This also allows for the information about the part to be recorded on the part so that it can be easily accessed.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the etching process of Merlin et al. to put identifying marks on the registration tabs on the anodes and cathodes or the housing casing of Lessar et al. in order to provide information about the anodes and cathodes that was easily accessible since the information would be contained on the part itself.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alix E. Echelmeyer whose telephone number is 571-272-1101. The examiner can normally be reached on Mon-Fri 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER

Alix E Echelmeyer
Examiner
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